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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/727,295	11/29/2000	Andrew Chien	ENTRPA.009A	4073

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EXAMINER

NGUYEN, VAN H

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 06/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/727,295

Applicant(s)

CHIEN ET AL.

Examiner

VAN H NGUYEN

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4/10/01 & 09/04/02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-12 are presented for examination.
2. The cross reference related to the application cited in the specification must be updated (i.e., update the relevant status, with patent numbers where appropriate, on the specification page 1). Correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made

4. Claims 1, 4, 6-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chen et al.** (U.S. 6,158,011).

1. As to claim 1, Chen teaches the invention substantially as claimed including a system for securing an application for execution on a computer (col.6, lines 37-50), the system comprising:

- a server computer (e.g., a server, abstract and fig.6);
- a network (e.g., an open network, abstract and fig.6); and
- a client computer (e.g., clients, abstract and fig.6) operably connected to the server computer via the network;

wherein the client computer receives from the server computer an application; wherein the client computer executes the application subsequent to receiving the application (col.7, lines 1-8); and

wherein the client intercepting a request for computer specific information that is made by the application (e.g., intercepts function calls or data packets; col.6, lines 37-50/ the client ...intercepts interconnect calls; col.8, lines 47-49/intercepts IP packets from applications; col.10, lines 46-67).

Chen does not specifically use the phrase “an interception module.” Chen, however, discloses “the clients are equipped with an applications level encryption and mutual authentication program ...which intercepts function calls or data packets” (col.6, lines 40-45) and ‘the client authentication software 20 intercepts interconnect calls” (col.8, lines 47-49).

It would have been obvious to one of ordinary skill in the art to have applied the teachings of Chen for “an interception module” in order to provide means for carrying out authenticated secure communications over the open network between the server and the clients.

5. As to claim 7, Chen teaches the invention substantially as claimed including a method of securing an application for execution on a computer (col.6, lines 37-50), the method comprising: intercepting requests to open a first key in a system database (col.10, lines 49-55 and col.11, lines 30-38).

Chen does not specifically teach “returning a handle that references a second key in a virtual database.” Chen, however, discloses “the channel 60 session key could be used to transmit back to the original sending party information necessary to recreate the channel 63 session key” (col.11, lines 42-45).

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It would have been obvious to one of ordinary skill in the art to have applied the teachings of Chen to include the above feature in order to provide means for establishing a fully authenticated "tunnel" between the peer applications without the need to modify any of the sockets, TDI protocols, or hardware drivers on either of the client computers.

6. As to claim 9, it is directed to a system for performing the method of claim 7 above, and is similarly rejected under the same rationale.

7. As to claim 8, the rejection of claim 7 above is incorporated herein in full. Additionally Chan further teaches means for opening a virtual key in a virtual database (col.10, lines 7-16 and col.11, lines 36-45).

8. As to claim 10, the rejection of claim 8 above is incorporated herein in full. However, claim 10 further recites "an interception module." Note the discussion of claim 1 above for "an interception module."

9. As to claim 11, it is directed to a program storage device storing instructions for implementing the method of claim 8 above, and is similarly rejected under the same rationale.

10. As to claim 12, Chen teaches opening a system database key in the system database (col.9, lines 52-64) modifying a key value that is associated with the system database key and associating in the virtual database the modified key value with the virtual key (col.10, lines 49-55).

11. As to claim 4, the rejection of claim 7 above is incorporated herein in full. Additionally Chan further teaches determining whether the requested key is in the virtual database (col.10, lines 26-41); if the key is not in the virtual database, storing fake information in the virtual database (col.7, lines 1-8; col.8, lines 47-56; and col.12, lines 40-67);

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12. As to claim 6, the rejection of claim 7 above is incorporated herein in full. Additionally, Chan further teaches determining whether the requested key is in a virtual database (col.10, lines 26-41); if the key is not in the virtual database (col.10, lines 26-41), accessing the key in the system database (col.10, lines 17-26).

13. Claims 2-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chen et al.** in view of **Haatainen et al.** (U.S. 6,678,734).

14. As to claim 2, Chen teaches the invention substantially as claimed including a method of securing an application for execution on a computer (col.6, lines 37-50), the method comprising: a request from the application for machine or user information is intercepted transparently to the application and providing fake machine or user information (col.7, lines 1-8; col.8, lines 47-56; and col.12, lines 40-67).

Chen, however, does not explicitly teach modifying the binary of the application.

Haatainen teaches modifying the binary of the application (col.8, lines 57-65; col.13, lines 42-51; and col.15, lines 11-14).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Haatainen and Chen because Haatainen's teaching would have provided a client/server virtual private network which is capable not only of carrying out authenticated secure communications over an open network between an authentication server and clients, but also authenticated secure peer-to-peer communications.

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15. As to claim 3, Chen teaches the request for machine depending information is selected from the following: a request for a machine name, a request for an environment variable, a request for setup information, and a request for IP information (col.8, lines 37-46 and col.10, lines 27-41).

16. As to claim 5, Chen teaches intercepting the request from the application (col.6, lines 37-50 and col.10, lines 46-67), but is silent on “inserting in an import table a reference to an interception module, wherein the reference is inserted in the import table such that the interception module is invoked in response to loading of the application.”

Haatainen teaches inserting in an import table a reference to an interception module, wherein the reference is inserted in the import table such that the interception module is invoked in response to loading of the application (col.14, lines 58-col. 15, lines 9).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Haatainen and Chen because Haatainen’s teaching would have provided a client/server virtual private network which is capable not only of carrying out authenticated secure communications over an open network between an authentication server and clients, but also authenticated secure peer-to-peer communications.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Kukura et al. (U.S. 66339231) discloses "Method and system for dynamic configuration of interceptors in a client-server environment."

- Hunt (U.S. 6629123) discloses "Interception of unit creation requests by an automatic distributed partitioning system."

- Hunt (U.S. 6499137) discloses "Reversible load-time dynamic linking."

- Jan et al. "Two integrated schemes of user authentication and access control in a distributed computer network." 1998 IEEE, pp. 419-424.


18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H NGUYEN whose telephone number is (703) 306-5971. The examiner can normally be reached on Monday-Thursday from 8:30AM - 6:00PM. The examiner can also be reached on alternative Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VHN


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